

REMARKS/ARGUMENTS

Examiner Chaudry is thanked for his thorough examination of the subject Patent Application. The Claims have been have been carefully reviewed, Claim 1 has been amended in response to the Examiner's kind comments, and all Claims are now considered to be in condition for Allowance.

Reconsideration of the rejection of Claims 1 under 35 U.S.C. 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention, is requested, in light of the following.

Claim 1 was amended was amended to overcome the Examiner's rejection.

Reconsideration of the rejection of Claims 1-5 under 35 U.S.B. 103(a) as being unpatentable over Miyanchy et al. (hereafter Miyanchy) USPPN 2003/0106011 further in view of Zeng et al. (herein after: Zeng, "Design and Implementation of a Turbo Decoder for 3G W-CDMA System", published March 11, 2002 and cited in applicants IDS), is requested, in light of the following.

A turbo decoder uses branch metric calculations in both the forward state metrics and the backward state metrics calculations. In Miyauchi modulo arithmetic operations are not taught. Zeng uses modulo arithmetic, but when overflow occurs, Zeng normalizes all state metrics (pg. 287, second paragraph). This adds time consuming

steps that affects performance. Zeng also notes that some approaches were taken to prevent overflow, but Zeng found that the overflow prevention could not easily be implemented.

In the present claimed invention modulo arithmetic and the log domain is used to avoid scaling and normalization (pg. 18, paragraph starting on line 13). This allows the present claimed invention to avoid the time necessary to normalize the state metrics, and therefore, produces superior performance. Thus the present claimed invention avoids the overflow/underflow and normalization operations in Zeng.

All Claims are now considered to be in condition for allowance.

Allowance of all Claims is Requested.

It is requested that should Examiner Chaudry not find that the Claims are now allowable, that he call the undersigned at (845) 452-5863 to overcome any problems preventing allowance.

Respectively submitted,

A handwritten signature in black ink, appearing to read 'SBA', with a stylized flourish extending to the right.

Stephen B. Ackerman,

Reg. No. 37,761